UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,007	12/23/2005	Kunihiro Kakihara	050757	1070
	7590 09/08/200 TOS & HANSON, LL	EXAMINER		
1420 K Street, N.W. Suite 400			EWALD, MARIA VERONICA	
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			09/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/562,007	KAKIHARA ET AL.			
Office Action Summary	Examiner	Art Unit			
	MARIA VERONICA D. EWALD	1791			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) ☐ Responsive to communication(s) filed on 12/05 2a) ☐ This action is FINAL . 2b) ☐ This 3) ☐ Since this application is in condition for allowant closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) Claim(s) 1,3 and 5-20 is/are pending in the app 4a) Of the above claim(s) 1,3,5-7 and 15-19 is/a 5) Claim(s) is/are allowed. 6) Claim(s) 8-14 and 20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or Application Papers	are withdrawn from consideration				
9) ☐ The specification is objected to by the Examiner 10) ☑ The drawing(s) filed on 23 December 2005 is/an Applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction 11) ☐ The oath or declaration is objected to by the Examiner	re: a) ☐ accepted or b) ☒ object drawing(s) be held in abeyance. See on is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/23/05.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

DETAILED ACTION

Election/Restrictions

13. Claims 1, 3, 5-7 and 15-19 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 14, 2008.

Drawings

14. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: items 7 and 8 are not included in Figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Application/Control Number: 10/562,007 Page 3

Art Unit: 1791

Claim Rejections - 35 USC § 112

15. Claims 9 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 9 recites the limitation "the peripheral edge" in line 3. There is insufficient antecedent basis for this limitation in the claim. Thus, claim 9 should be corrected to state *a peripheral edge* or a peripheral edge should be identified earlier in the claim to provide the proper antecedent basis.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35U.S.C. 102 that form the basis for the rejections under this section made in thisOffice action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Steingiser (U.S. 3,830,893). Steingiser teaches a resin molding heat-treating apparatus for heat-treating a parting-line portion of a resin molding or a specific portion of the resin molding, which portion is apt to undergo peeling of a thin surface resin film, partially at a high temperature, the apparatus comprising: heating section having a shape conforming to a contour line of a portion to be heated of the resin molding (item 20 – figure 2; item 56 – figure 4; column 4, lines 23 – 35); and a fixing jig for fixing the resin molding removably (item 30 – figure

3; column 4, lines 48 - 55), wherein the portion to be heated of the resin molding is heat-treated at a temperature while being approximated to the heating section (column 4, lines 48 - 75); wherein the heating section is constructed such that a member analogous to the contour line of the resin molding having a shape about twice as large as the resin molding is heated by a high-frequency heating method (item 56 -figure 4; column 4, lines 1 - 10 and 23 - 35).

Steingiser teaches a heating apparatus for a resin molding, which in the reference is a preform with a parting line (item 57 – figure 4). The resin molding is secured via a holder or jig and passed into a heating apparatus, wherein high-frequency high heat is applied to heat the preforms. The heating apparatus includes a wave guide which follows the contour of the preform. The portion of the preform being heated is the body, while the neck portion is appropriately shielded because it has already assumed its form (column 4, lines 60 – 67).

Claims 8 – 10 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (U.S. 4,300,880). Suzuki teaches a resin molding heat-treating apparatus for heat-treating a parting-line portion of a resin molding or a specific portion of the resin molding, which portion is apt to undergo peeling of a thin surface resin film, partially at a high temperature, the apparatus comprising: heating section having a shape conforming to a contour line of a portion to be heated of the resin molding (item 13 – figures 2 and 3); and a fixing jig for fixing the resin molding removably (item 25 – figure 5; column 4, lines 40 – 50), wherein the portion to be heated of the resin molding is heat-treated at a

Application/Control Number: 10/562,007

Art Unit: 1791

temperature while being approximated to the heating section (column 2, lines 20 -35); wherein the fixing jig is attached to several positions of a rotary disc (item 45 -figure 3; column 6, lines 15 - 20) and the portion to be heated of the resin molding projects from the peripheral edge of the rotary disc so as to pass through a heat-treating space formed in the heating section (figure 3); wherein a shield plate having an opening portion of a shape conforming to the contour line of the portion to be heated of the resin molding is disposed in a sandwiching relation to the heating section so that the other portion than the portion to be heated of the resin molding is not heated (item 27 -figure 5; column 4, lines 45 - 50).

Suzuki, like Steingiser, teaches a heating assembly for high-temperature heating of a resin molding, which in this case, is also a preform. The preform is held by a jig secured to its neck and is transported into the heating assembly. The jig also includes a neck support or shield plate disposed in sandwiching relation to the heating section, such that the neck support prevents heating of the preform neck. Furthermore, the preform body being heated projects beyond the periphery of the disk.

The Examiner is noting, that Applicant has claimed a resin molding heat-treating apparatus, for heat-treating a parting line portion of a resin molding or a specific portion of the resin molding, which portion is apt to undergo peeling of a thin surface resin film. The Examiner is noting such a phrase as a recitation of intended use, which does not serve to distinguish the claimed invention from the prior art structure and does not result in a structural difference. The body of the

claim fully describes the invention as comprising a heating section with a shape conforming to the contour line of the resin molding and a jig for fixing the resin molding removably. Thus, regardless of what the resin molding is as recited in the preamble, the apparatus as claimed is fully described in the claim body. Thus, with respect to the references of Steingiser and Suzuki, both teach heating assemblies which follow the contour of the resin molding and jigs for fixing the resin molding removably. Thus, both references teach apparatus fully capable of operating as claimed and fully capable of performing the intended use. Per MPEP 2111.02, "During examination, statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the recited purpose or intended use results in a structural difference (or, in the case of process claims, manipulative difference) between the claimed invention and the prior art. If so, the recitation serves to limit the claim. See, e.g., In re Otto, 312 F.2d 937, 938, 136 USPQ 458, 459 (CCPA 1963); In re Sinex, 309 F.2d 488, 492, 135 USPQ 302, 305 (CCPA 1962) (statement of intended use in an apparatus claim did not distinguish over the prior art apparatus). If a prior art structure is capable of performing the intended use as recited in the preamble, then it meets the claim. See, e.g., In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997)."

Claim Rejections - 35 USC § 103

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Wiatt, et al. (U.S. 4,963,086). Suzuki teaches the characteristics previously described but do not teach that the fixing jig is attached to several positions of a side edge of a belt member and the portion to be heated of the resin molding projects from the belt member so as to pass through a heat-treating space formed in the heating section.

Modifying the disk of Suzuki such that it is a belt member to convey the resin molding through a heat-treating space, however, is an obvious modification and known to one of ordinary skill in the art of heating preforms. For example, Wiatt, et al. teach a preform transfer assembly, wherein a track and a conveyor belt are used in conjunction with each other, respectively to move a plurality of preforms into proximity with a heating station (figure 8; column 8, lines 27 – 50).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to configure the apparatus of Suzuki such that the fixing jig is attached to several positions of a side edge of a belt member, as taught by Wiatt, et al. for the purpose of conveying the preforms to the heating station.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Seefluth (U.S. 3,554,506) and further in view of Pusch (U.S.

Application/Control Number

Art Unit: 1791

3,162,895). Suzuki teaches the characteristics previously described but does not teach that the heating section is constructed such that a large number of fine holes are formed in a pipe which is analogous to the contour line of the resin molding and which is bent so as to be in a shape about twice as large as the resin molding, and hot air is ejected through the fine holes to heat the resin molding.

It is already noted that Suzuki teaches a heating assembly following the contour line of the preform, wherein heating is performed via radiant heat.

However, configuring the heating assembly such that hot air is used and further configured such that the heat assembly is a pipe with a plurality of holes, following the contour of the preform is an obvious modification.

It is known that hot air can be used to heat preforms. For example, Seefluth teaches a heating assembly for preforms, wherein the preforms are placed in a heating block. Hot air is then circulated through the preform to heat it (column 2, lines 65 – 75). Though not teaching the use of a pipe with holes, such a modification would also be obvious. For example, Pusch teaches a heating assembly for pipe insulation, wherein the heating element is in the shape of the pipe and includes a plurality of perforations (item 7 – figure 1) through which hot air or steam is fed to cure the piping insulation (column 4, lines 45 – 55).

Therefore, it would have been an obvious modification to one of ordinary skill in the art at the time of the Applicant's invention to configure the apparatus of Suzuki such that hot air is used to heat the preform, wherein the heating assembly is configured as a pipe with a plurality of holes through which the hot

air is blown for the purpose of heating the preform on its surface or on portions which are to be heated, as taught by both Seefluth and Pusch.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Sugiyama, et al. (U.S. 5,032,700). Suzuki teaches the characteristics previously described but do not teach that the heating section is heated by an electromagnetic induction heating method. However, such a modification is known and would have been obvious to one of ordinary skill in the art of heating preforms.

For example, Sugiyama, et al. teach the use of inductive heating coils to heat the heating section used for heating preforms (column 7, lines 45 - 65). The heating coils are wound in a variety of configurations (figures 6 - 7, 9, 11 - 12). Furthermore, such a configuration ensures rapid and high heat delivered to the preform (column 9, lines 20 - 23).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the Applicant's invention to configure the apparatus of Suzuki with the electromagnetic induction heating elements of Sugiyama, et al. for the purpose of delivering high and rapid heat to the preform, as taught by Sugiyama, et al.

Information Disclosure Statement

18. The prior art made of record, though not relied upon, is deemed pertinent to the state of the art and thus, has been considered.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARIA VERONICA D. EWALD whose telephone number is (571)272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MVE

/Maria Veronica D Ewald/ Examiner, Art Unit 1791